

REMARKS

Claims 1-7 have been rejected under 35 USC 103(a) as unpatentable over Miyaji in view of Klebanoff, U.S. Patent No. 6,169,652 and Yoshida, Japanese Patent No. 02-256256. This rejection is respectfully traversed.

The Examiner asserts that Miyaji does isolation of the vacuum mask chamber, he admits that Miyaji fails to teach one or more vacuum valves for isolating a mask chamber (see Office Action, item 5). The Examiner also asserts that Miyaji does disclose use of vacuum valves for the purpose of maintaining isolation between separate vacuum environments (citing col. 4, lines 1-31 and col. 8, lines 1-18) and that it would have been obvious to have provided vacuum valves in Miyaji in order to maintain isolation between adjacent independently evacuable regions as taught by Miyaji. Applicant respectfully submits that Miyaji fails to teach or suggest the features of amended claim 1.

Miyaji teaches a mask chamber/receptacle with a reticle R1 (see Fig. 1, col. 5, lines 52-55). Miyaji also teaches use of an illumination optical system IL, and a projection optical system PL (Fig. 1, col. 5, lines 20-32). However, Miyaji does not teach or suggest one or more vacuum valves between a projection optics chamber and a vacuum mask chamber for isolating the mask chamber from the projection optics chamber. Rather, Miyaji teaches, apart from the above valves V8 and V6, use of further valves V2, V4 which communicate with the projection optical system PL (see Fig. 1, col. 5, lines 30-38). However, none of the valves V2, V4, V5 or V8 are vacuum valves between the projection optics chamber and the vacuum mask chamber for isolating the mask chamber from the projection optics chamber.

Further, Miyaji's valves V2, V4, V5 and V8 allow the mask chamber/receptacle comprising the reticle R1 to fill with nitrogen gas to establish a desired inert gas atmosphere for projection exposure (see Fig. 5, col. 8, lines 54-60). The valves between the projection optics chamber and the vacuum mask chamber, according to the claimed invention, provide an inert gas to the mask chamber for dechucking a mask in the vacuum mask chamber. In contrast, Miyaji

suggests that the reticle/mask is dechucked not in the mask chamber/receptacle with the reticle R1, but in a separate chamber ("reticle cassette storage means RC", col. 8, lines 22-23 and Fig. 5).

Thus, the prior art of record fails to teach or suggest, either alone or in combination, the features of claim 1.

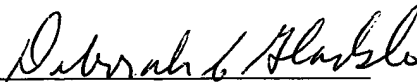
Claims 2-7 are allowable at least due to their respective dependencies. Applicants request that this rejection be withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark office determines that an extension and/or other relief is required, applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 543822004700.

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Respectfully submitted,

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